

# Manitoba Medical Association

## Committee on Sociology

- E. S. MOORHEAD, B.A. (T.C.D.), M.B., B.Ch. (Dub.), B.A.O., F.R.C.P. (C.), Chairman.
- F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.), Secretary.
- J. A. GUNN, C.B., O.B.E., B.A., M.D., C.M. (Man.), F.R.C.S. (C.).
- J. C. McMILLAN, M.D. (Man.), F.R.C.P. (C.).
- ROSS B. MITCHELL, B.A., M.D., C.M. (Man.), F.R.C.P. (C.).
- F. D. McKENTY, M.D. (Man.), F.R.C.S. (C.).
- C. ATHOL R. GORDON, M.D. (Man.).
- H. MEDOVY, B.A., M.D. (Man.).

## Executive Officers

### President

- G. W. ROGERS, M.D. (Man.), Dauphin.

### First Vice-President

- F. D. McKENTY M.D. (Man.), F.R.C.S. (C.), Winnipeg.

### Second Vice-President

- G. P. ARMSTRONG, M.D. (Man.), Portage la Prairie.

### Honorary Secretary

- F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.), Winnipeg.

### Honorary Treasurer

- F. G. McGUINNESS, M.D., C.M. (Man.), F.R.C.S. (C.), Winnipeg.

### Retiring President

- J. C. McMILLAN, M.D. (Man.), F.R.C.P. (C.), Winnipeg.

## Advisory Council

President of Manitoba Medical Association:

G. W. Rogers, M.D. (Man.)

Representative of College of Physicians and Surgeons.

Dean of Faculty of Medicine:

A. T. Mathers, M.D., C.M. (Man.), F.R.C.P. (C.)

Deputy Minister of Health and Public Welfare:

F. W. Jackson, M.D. (Man.) D.P.H. (Tor.)

May Be Added:

President of District Society.  
M.O.H. of District.  
Others as required.

## Members of the Executive

### Representatives of District Medical Societies

#### Central

W. H. CLARK, M.D. (Man.).

#### Southern

J. F. WOOD, M.D. (Man.)

#### Brandon and District

T. A. PINCOCK, M.D. (Man.).

#### North-Western

J. M. SIGVALDASON, M.D. (Man.).

#### Winnipeg Medical

R. R. SWAN, M.B., Ch.B. (Glasg.).

#### Northern

G. D. SHORTREED, M.D., C.M. (Man.).

#### Border Medical

W. O. HENRY, B.A., M.B. (Tor.).

### Members Elected at Large

E. D. HUDSON, M.D. (Man.),  
Hamiota

(Term Expires 1935)

J. S. McINNES, M.D. (Man.),  
Winnipeg

(Term Expires 1935)

C. W. WIEBE, M.D. (Man.),  
Winkler

(Term Expires 1936)

F. A. BENNER, M.D., C.M. (McG.),  
M.R.C.S. (Eng.), L.R.C.P. (Lond.),  
Winnipeg

(Term Expires 1936)

T. W. SHAW, M.D. (Man.),  
Russell

(Term Expires 1937)

W. E. R. COAD, M.D., C.M. (Man.),  
M.R.C.S. (Eng.), L.R.C.P. (Lond.),  
F.R.C.S. (Edin.),  
Winnipeg

(Term Expires 1937)

### Representatives of College of Physicians and Surgeons of Manitoba

H. O. McDIARMID, M.D., (Man.),  
Brandon.

W. G. CAMPBELL, M.D., C.M. (McG.),  
Winnipeg.

W. H. SECORD, M.C., M.D., C.M. (McG.),  
Winnipeg.

### Representative on C.M.A. Executive Committee

W. HARVEY SMITH, M.A., M.D.,  
C.M. (McG.), F.R.C.S. (C.),  
LL.D. (Man. and McG.),  
Winnipeg.

## Committees

### Editorial Board of C.M.A. Journal:

- ROSS B. MITCHELL, B.A., M.D., C.M. (Man.), F.R.C.P. (C.).
- E. S. MOORHEAD, B.A. (T.C.D.) M.B., B.Ch. (Dub.), B.A.O., F.R.C.P. (C.).

### Representatives to C.M.A. Council:

- G. W. ROGERS, M.D. (Man.).
- F. W. JACKSON, M.D. (Man.), D.P.H. (Tor.).
- (Five others to be appointed later.)

### Auditors:

- D. C. AIKENHEAD, M.D. (Man.).
- A. J. SWAN, M.D. (Man.).

### Committee on Maternal Mortality:

- C. LENNOX ARTHUR, M.D. (Man.), F.R.C.S. (C.), Convener.

### Editorial Committee:

- C. W. MACCHARLES, M.D. (Man.), Convener.

### Workmen's Compensation Referee Board:

- W. CHESTNUT, M.D., C.M. (Man.), Chairman.
- W. H. SECORD, M.C., M.D., C.M. (McG.), Vice-Chairman.

Third member to be selected from panel for each meeting.

### Legislative Committee:

- G. S. FAHRNI, M.D., Ch.M. (Man.), F.R.C.S. (C.), Chairman.

### Radio Committee:

- R. W. RICHARDSON, M.D. (Man.), Convener.

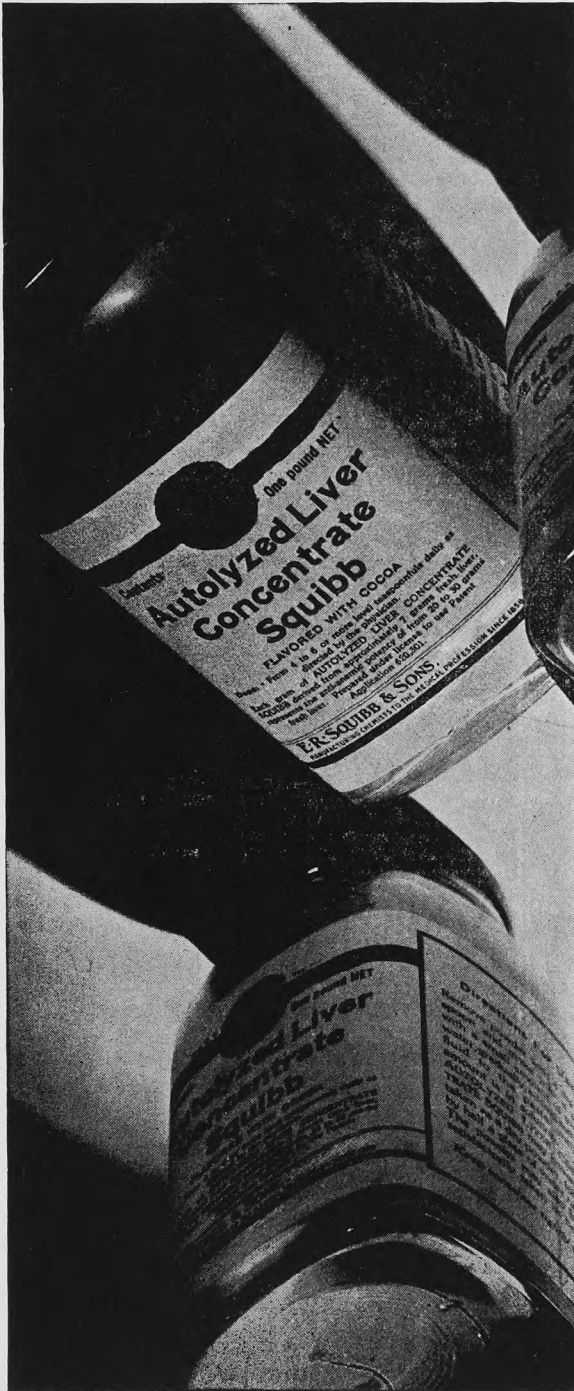
### Extra Mural Committee:

- J. S. McINNES, M.D. (Man.), Convener.

### Committee on Historical Medicine and Necrology:

- ROSS B. MITCHELL, B.A., M.D., C.M. (Man.), F.R.C.P. (C.), Convener.

# AUTOLYZED LIVER CONCENTRATE SQUIBB



## ***An effective anti-anemic liver preparation for oral use***

AUTOLYZED LIVER CONCENTRATE SQUIBB is not an extract or liver fraction, but whole liver, *autolyzed*, powdered — with cocoa added for flavor. It can be taken in a variety of ways—dissolved in milk or tomato juice, in warm bouillon or mixed with butter and spread on bread. Beneficial—because it provides all the blood regenerative factors of whole liver. In addition it has twice the Vitamin B and G potency of dried yeast.

Given to patients, Autolyzed Liver Concentrate Squibb induces prompt clinical response—a distinct rise in hemoglobin concentration and a noteworthy improvement in appetite, weight, and strength.

Autolyzed Liver Concentrate Squibb is economical to use—in many cases costing as little as 7c a day for the first year's treatment of an uncomplicated case of pernicious anemia.

*Marketed under license to use U. S. Patent  
Application Serial No. 620,301. Marketed  
in ½ and 1-lb. bottles*

**E. R. SQUIBB & SONS OF CANADA, Ltd.**  
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

## The Hazard of Combustible Anesthetics

By

D. C. AIKENHEAD, M.D. (Man.)

*Lecturer in Clinical Surgery (Anaesthetics), University of Manitoba; Senior Anaesthetist to the Winnipeg General Hospital*

The problem of the explosion of gases used in operating rooms to produce inhalation anesthesia is frequently discussed. Why should we continue to use such gases for the production of anesthesia where the question of explosion comes into consideration? To answer the latter query one must balance the desirable features of the gas in question, with the dangers from fire in its use.

If explosion were the only hazard of anesthesia the simplest way to avoid it would be to use non-explosive anesthetics. But the most important non-explosive anesthetic, chloroform, has dangers of another type far greater than the explosion risks of ethylene or ether. The perfect form of anesthesia, free from all dangers, has not yet been discovered. Every means and form of anesthesia has to be considered, not as absolutely good or bad, but in its advantages and disadvantages in comparison with the other means and forms of anesthesia now available. The opinion is widely held amongst those who have had a considerable experience with ethylene that, apart from the risk of explosion, this substance has some marked advantages as an anesthetic. Reports from hospitals in which ethylene has been used show that there is generally a strong desire to eliminate this risk and to continue this form of anesthesia. <sup>(1)</sup>

On the other hand, reports from some of the foremost hospitals in the country in which ethylene is not used on account of fear of explosion, show that high grade inhalation anesthesia is effected by means of nitrous oxide and ether in combination or in sequence. The advantages claimed for ethylene are more complete relaxation than under nitrous oxide, more rapid termination of anesthesia than after ether, and less risk of post operative pneumonia. But these advantages can also be obtained by a combination of nitrous oxide and ether with a post anesthetic hyperventilation with carbon dioxide. Spinal anesthesia and basal anesthesia are also now used effectively.

That mode of anesthesia is best which has the lowest mortality and morbidity not merely during the operation but in the post-operative period as well. The hazard of explosion in an anesthetic apparatus supplying a combustible gas vapor, such as ethylene or ether, can be estimated fairly only from the number of deaths assignable to it in comparison with the number of deaths, immediate and consequent, from other methods of anesthesia. <sup>(1)</sup> The chief hazards that have to be compared are; fatal failure of respiration—syncope and collapse—post anesthetic necrosis of the liver (chiefly chloroform) and post operative

pneumonia. It might be pointed out that the extent of the hazards from explosion or any other of the less frequent accidents associated with the use of such anesthetic apparatus are small indeed compared to the advantages of better controlled and safer anesthesia which they have also brought about.

Smith and Morton <sup>(2)</sup> state that in first class hospitals fatal post operative pneumonias occur in one 200–300 major surgical operations. Sword <sup>(3)</sup> claims that persistent hiccup occurring post operatively is of more danger than that of an explosion using ethylene for inhalation anesthesia.

Dr. Herb, <sup>(4)</sup> in reporting upon the tenth anniversary of the use of ethylene, mentions over one million ethylene anesthetics. Out of this number Dr. Herb mentions twenty explosions, with five deaths and one injured. One death resulted from the use of ethylene while opening an empyema with the actual cautery.

In the same enquiry Dr. Herb had asked for accidents in the use of nitrous oxide-oxygen-ether. Replies to this questionnaire mentioned thirty-nine explosions with five deaths and seven injuries. The number of administrations of the above-named sequence were not given, but one presumes it would at least equal the number of ethylene anesthetics reported upon.

Dr. Y. Henderson, <sup>(1)</sup> chairman of the committee on anesthetic accidents, reports upon the replies to a questionnaire upon the hazards of ethylene from two hundred and eighty-eight hospitals (each over two hundred beds). He states that one hundred and twenty-nine were using ethylene, one hundred and fifty-eight had never used it, and twelve have ceased to use it. The latter twelve have had no accidents, but were deterred from its use by reports from other centres. Dr. Hugh Cabot, reporting from sixty-four hospitals stating a preference in anesthesia—ethylene was the anesthetic of choice in twenty-two cases, nitrous oxide and oxygen in twenty-four, and drop ether initiated with nitrous oxide in eighteen.

What constitutes an explosive mixture?

Flammability Limits, Per Cent by Volume <sup>(5)</sup>

Anesthetic	Atmosphere	Lower	Upper Limits
Ether	Air	1.8	25.9
Ethylene	Air	3.0	28.6
Ethylene	Oxygen	3.1	79.9

It will be noted with ethylene that the danger point in the higher concentrations is around 80 per cent. Fortunately the mixtures one uses in ethylene anesthesia contain over eighty per cent of ethylene. The risk of explosion comes in using rich oxygen mixtures to flush out the patient's lungs at the completion of the operation. This coincides with the reports which state most of the accidents with ethylene occur towards the end of the operation. The report of a fatal accident



at Ann Arbor, Mich., mentions the use of seventy-five per cent ethylene and twenty-five per cent oxygen for intermittent obstretical anesthesia. This explosion occurred upon a wet night in the Autumn when one would suppose the relative humidity would be high. The humidity was not recorded by an instrument in this report. The Presbyterian hospital in New York mentions in a bulletin that the relative humidity in the operating room was 30 with the windows closed. Yet this hospital is close to the sea coast and only a few minutes' walk from the North river. The deduction one draws from such material is that the relative humidity should be noted by a hygrometer in the operating room where combustible gas mixtures are used for anesthesia.

Given a combustible gas mixture, how can a spark in the operation room be produced to cause an explosion? It may be produced by electro-surgical units, such as high frequency knives, cautery, diathermy, coagulation and fulguration units, radiographic, fluoroscopic or X-ray equipment of the open or unprotected type, electric motors of the commutator type and open switches and rheostats. None of these types of apparatus should be used in an operating room with ethylene.

Many explosions are put down to the cause of "static" electricity. We do not know (5) just what static electricity is, nor do we know what natural laws it follows. We do know its effects, some of its causes, and some of its properties. One way of creating static electricity is by the contact or separation of two substances, one or both of which may be a non-conductor. It is in this way that one builds up an electrostatic charge on his person by walking across a carpet, rug, or rubber mat. The flow of a dry gas through an orifice builds up a static charge in the same way. Once an electrostatic potential is established until that potential is discharged it remains on the charged object ready to cause trouble if it escapes by "jumping" or "sparkling". If this discharge occurs in a room where a flammable gas exists, such as an operating room, there is the possibility of an explosion.

Two sources of "static" present themselves in a gas machine — the one, contact between the machine and other apparatus and individuals; and the other, the discharge of "static" occurring in connection with the anesthetic machine itself and independent of outside conditions. Tiny particles of powder, dust, etc., in the breathing tube, friction between moving parts of the rubber bags during inspiration and expiration, all have a theoretical tendency to build up "static" electricity in a gas machine. It would appear that "static" is frequently built up in such a manner, but causes explosions only exceptionally.

As the cause of "static" explosion is not perfectly clear, naturally opinions differ as to the method of its prevention. Two main suggestions are put forward to obviate "static": (1) Grounding, (2) High relative humidity.

#### (1) GROUNDING.

One of the larger cities to the South has operating room floors composed of metal squares filled in with tile. These metal squares project upwards slightly above the terrazo tile so that all operating room furniture (each article has a metal chain attached which drags upon the floor) is constantly in touch with metal. The metal squares in the floor are well grounded to the water pipe. Before the installation of this rather elaborate system the hospital in question reported a number of explosions in using ethylene, fortunately none were the cause of human injury. Since the installation of this system of grounding, the hospital reports the routine use of ethylene as an anesthetic without any further trouble of explosion. Whether it is desirable to actually "ground" the patient to the operating table is an open question. To do so may add a new danger: namely the serious effects of possible short circuiting diathermy or similar apparatus. Serious burns have been reported from short circuiting under similar conditions. One is apt to be lulled into a sense of false security when one depends entirely upon grounding to eliminate the danger of static. Where chains have to be connected to the various pieces of operating room furniture each time a gas machine is used the tendency is, after months or years of freedom from trouble, to ease up on grounding, thinking the latter to be "fussy". It is a fact that many hospitals using ethylene never have used a system of grounding, yet have had no bother from explosions.

#### (2) HIGH RELATIVE HUMIDITY.

The consensus of opinion at the moment would seem to be that a relative humidity of 55 to 65 is the greatest safeguard in preventing "static" explosions with the use of inflammable gases. Hoover<sup>(6)</sup> mentions that glass and glazed tile cannot be electrified by friction if the relative humidity is above 45-50%, bakelite 50-55% and celluloid 55-60%. Rubber was quite varied in its properties. It was found, however, that by scuffing along the floor, a form of rubber matting, with either rubber or leather shoes only a trace of "static" could be detected at a relative humidity of 60%. At 65% this slight trace had disappeared. Only a woollen blanket and a rubber rod retained their "static" at a relative humidity of 65%. This particular combination retained its ability to become electrified even though the humidity was raised to 85%. The operating rooms of the Winnipeg General Hospital during the week of April 7th, at 80°F. have been running a relative humidity from 50-63%.

To prevent the accumulation of "static" within the gas machine itself, particularly within the rubber bags, it has been suggested that the gases should pass through water before inhalation, or if this is not practical that wet sponges be inserted in each rubber bag before commencing the



anesthetic. Henderson suggests the use of a metal spirometer in place of the rubber bag into which the patient inhales and exhales.

McKesson stresses that the patient, anesthetist and gas machine keep contact throughout the anesthetic. Should this contact be retained during the operation, McKesson is of the opinion, that one may use inflammable gases without undue risk from "static" developing upon the gas machine, patient or anesthetist.

Ethylene diffuses into the air very rapidly with a corresponding decrease of concentration below the inflammable limit. The risk of an explosive mixture being carried for more than a few feet from the anesthetic apparatus and operating table is small. Ether on the other hand diffuses rather slowly and a current of its vapor may be carried by a draft for a considerable distance with a resulting flare if the vapor reaches a cautery or spark.

As the conditions of operating rooms vary in different cities though the fundamentals remain the same, it is suggested that the following principles should be of value in avoiding the hazard of using inflammable gases for anesthesia.

(1). Maintenance of a relative humidity of 50-55% in the operating room. This condition to be checked daily by a reliable "wet and dry" bulb thermometer.

(2). The exclusion of woollen blankets or woollen fabrics from the operating rooms.

(3). Prohibition of the use of oils or grease upon gas machines and tanks.

(4). Excluding the use of ethylene or ether with any electrical apparatus that produces or is capable of producing a spark.

(5). A thorough monthly inspection by a competent electrician of all outlets, fixtures, lamps, cords, and apparatus of the operating room, with particular care given to locating grounds and loose contacts. Immediate attention to the needed repairs and the removal of defective equipment.

Statistically, explosion probably is the least hazard in anesthesia today. Nevertheless, it behooves all who have to do with surgery in an operating room to use every possible precaution in preventing this rare type of anesthetic accident.

#### REFERENCES

- (1). Dr. Y. Henderson. J.A.M.A., 25/11/33.
- (2). Smith and Morton. Arch. Surg. May '29.
- (3). Sword. J.A.M.A., 1/10/27.
- (4). Herb, I. J.A.M.A., 25/11/33.
- (5). Buchanan. Bull. Ohio Chem. Co.
- (6). Hoover. Med. Hosp., July '30.

## \*Asthma from the Standpoint of the Rhinologist

By

G. W. FLETCHER, M.B. (Tor.)

*Professor of Otolaryngology, University of Manitoba; Oto-Laryngologist to the Winnipeg General Hospital*

All cases of asthma would seem to contain two factors—septic and allergic. Extremes of each type are easily differentiated both clinically and histologically.

My attention was drawn to the subject of asthma in rather an indirect manner. Instead of entering by the front door I have entered by the back.

During the progress of my work on the nasal accessory sinuses I have noted from time to time a case having asthma who has reported a good result either partial or in a few cases an apparent cure. These cases are of course isolated occurring as they have in the pursuit of ordinary nasal work.

As a matter of curiosity I have undertaken a search into my major sinus cases at the Winnipeg General Hospital for the last four years, 1931 to 1934 inclusive, and my report is as follows:—

Of 76 cases operated on for the various sinuses, the antra of Highmore in all cases with additions in some cases of ethmoids, sphenoids and frontals in different combinations, I have found 12 that complained of asthma. I have added to this one done in 1925 making 13 cases in all out of 77 operated upon. A few of these cases have interesting points in their histories and I shall refer to them briefly.

#### Case 1.

Mrs. J. P. Age 51 — was seen by me first on Jan. 5, 1934, complaining of yellow nasal discharge for 5-6 years and asthma for the same length of time.

Examination showed polypi R & L, purulent discharge and antra were dark on transillumination.

A double antrum operation was done Jan. 9, 1934, and ethmoids later. The antral membranes were greatly thickened especially the left, the cavity of which was completely filled except a small space in the centre which contained a small mass of dark brown, viscid rubbery secretion. (I have found this same material in other asthmatic cases).

Tissue from the left antrum was sent to the laboratory and report was as follows:—

Micro-section shows edematous connective tissue covered with columnar epithelium and densely infiltrated with eosinophiles.

\*Paper read at the meeting of the North-Western Section of the American College of Surgeons at St. Paul, Minnesota, U.S.A., March 16th, 1935.

**Report March, 1935.**

Attacks less frequent and severe. Sputum less.

**Case 6.**

*L. G. Age 17*—was first seen by me on Nov. 5, 1934, complaining of bronchial asthma for 14 years. This started from an attack of bronchial pneumonia. This asthma is worse in spring and fall. He also complains of copious nasal discharge and nasal obstruction. He had tonsils and adenoids removed many years ago.

Examination showed R. antrum dark and L. antrum clear on transillumination. Pus was seen coming from above the lower turbinal into the P. N. space.

On November 8th, he had a R. Rad. antrum, R. Middle turbinal and ethmoids, and also a submucous resection.

On Feb. 14, 1935, he writes: "My nose is much better but not completely cured. I can breathe through it much easier. I think my nose has had a lot to do with my asthma attacks. My asthma attacks are practically nil and I have gained 15 pounds since the operation on my nose."

**Case 7.**

*Mr. H. V. S. Age 21*—was first seen by me on June 19, 1928, complaining of nasal obstruction and irritation. Has had polypi removed and cautery applied. Duration of nasal trouble and asthma 5 years.

Examination showed R. antrum dark and L. antrum clear on transillumination. Polypi in R. nares. L. Middle turbinal polypoid and edematous. Septum to right moderately.

Between July 3, 1928, and July 31, 1928, he had a R. Rad. antrum, ethmoids R. & L. and a submucous resection done.

On Feb. 15, 1935, he writes: "I have nothing unusual in the way of nose discharge, no headaches and not the slightest trouble breathing. I am not troubled with asthma, in fact the only reminder of the trouble I had in the past is the slightest suggestion of hay fever during the months of June and July."

Point of interest in this case is the time elapsed since the disappearance of his trouble.

*Miss D. Age 35*—Seen by me first on July 17, 1933, complaining of bronchial asthma of a duration of 9 months following the removal of a single nasal polyp. Had slight hay fever previous to this removal but no sign of asthma.

Examination showed right and left antra dark on transillumination. Has a sticky P. N. discharge and also a nasal discharge.

**Diagnosis**—Double chronic antral disease. Double Rad. antrum done July 21 and R. ethmoids were exenterated later.

**Result**—She was free from asthma for three months, then had a relapse. Asthma is still present but attacks are not so frequent and severe as formerly.

The point of interest in this case was that the exciting cause was apparently the removal of one polyp.

**Case 13.**

*Mrs. C. E. T. Age 46*—Seen by me first on Feb. 15, 1927. This lady said she had had antrum trouble for several years. She had been treated for sinus trouble for some considerable time.

Four years ago asthmatic attacks began following hay fever and bronchitis.

A double Rad. antrum operation was performed Oct. 31, 1933.

In March, 1935, I examined her in my office. The asthma is not present although the nasal membrane is still of the hay fever type and she suffers at times from nasal obstruction.

The asthma has disappeared but the hay fever is still present.

**STATISTICS***Classification of Cases.*

Septic	-	-	5 cases
Allergic	-	-	5 cases
Mixed	-	-	3 cases

Two cases only were examined for eosinophilia as follows:—

*Eosinophilia—Case 1. Mrs. P.*

Report Jan. 11, 1934. Micro:—Section shows oedematous tissue covered with a columnar epithelium and densely infiltrated with eosinophilia.

*Case Mrs. M. (Blood).*

White cells show:—

Polymorphs	-	-	50%
Lymphocytes	-	-	46%
Eosinophilis	-	-	4%

*Average Intervals Since Operation:*

Cured to date	.....	9 2/3 months
Improved to date	.....	1 year, 6 months
Not improved to date	.....	6 years

**13 CASES**

Ages	-	-	16-62 years
Average	-	-	36 years
Sex	-	-	Males 5 Females 8

*Operations.*

Antrum—single or double in all cases.

In addition

Ethmoidectomy and Frontals	.....	5 cases
Sphenoid	.....	1 case
Submucous and partial turbinectomy	.....	2 cases

*Results—Cure to date:*

4 Cases	{One after 7 years		
	{One after 2 years		
	{One after 14 years		
	{One after one month		

Improved	-	-	-	3 cases
Same or worse	-	-	-	4 cases
Cannot trace	-	-	-	2 cases

## Opinions by Various Writers

SIR ST. CLAIR THOMSON.

*Diseases on N. & T.* page 189.

Every asthmatic patient should have his nose examined and if necessary treated.

If polypi are present or if there is polypoid degeneration of the middle turbinal these diseased conditions can be cleared away with good prospect of considerable or even complete and lasting relief in a large proportion of cases particularly in those where the disease did not begin in childhood.

Incomplete removal of polypi may bring on a first attack of asthma. Case II.

DR. RALPH J. FENTON,  
Portland, Oregon.

*Canadian Medical Journal*, Feb. 1935.

He states:

Esinophilia are specifically attracted to the tissues by certain protein or chemical stimulants notably plant and animal allergens, and the toxins of certain animal parasites.

*Relation Between Asthma and T. B.*

Dr. J. D. Adamson of Winnipeg, states that he has observed a number of cases of tuberculosis in which the patient has become asthmatic and he explains this on the theory that they become sensitized to their own secretions.

COATES AND ERSNER—Paper read before Laryngological Section A. M. A., July 1929.

They state:—

1. That 75% polypi were secondary to pathological changes in the maxillary sinus.
2. The esinophilio is a factor in all inflammations irritative rather than infective in character, such as chronic rheumatism, diseases caused by intestinal parasites, chorea, asthma and other conditions.
3. They associate this condition with allergic conditions very closely.
4. They differentiate a distinct type of membrane with allergic diseases of nose.

At a meeting of the American Medical Association (Laryngological Section) May, 1927, a symposium on asthma was held, and the following papers presented:—

- I. "Skin tests in patients with Asthma" — by James S. McLaughlin, of Philadelphia.

He states:—

1. In 1281 patients suffering from bronchial asthma 23,725 routine tests were made. Of these 11.3% were positive.
2. While the skin test is a valuable aid, more important is the actual clinical contact with

the offending substance as determined by the history of the patient.

- II. "Factors governing the treatment of asthma divided into specific, surgical, vaccine and drug"—by Alexander Clark, of Philadelphia.

*Specific Treatment Consists of:—*

1. Elimination of substance giving skin reactions from patient's surroundings.  
Hypo sensitization which is only partial and temporary and not curative.
2. *Surgical Treatment.*  
He agrees that chronic infections of the nose are of great significance and should be appropriately treated.
3. *Vaccines* he uses in cases of frank infections and in those cases in which he fails to find skin reactions.
4. *Drugs.* Iodides, Stramonium and Epinephrine. These are palliatives only.  
In the combined treatment he has obtained good results in 62% and poor in 38% of 882 cases treated.

- III. "A paper on Nose and Throat Observations in Relation to Asthma" — by Philip S. Stout, M.D., Philadelphia.

*Results:*

No improvement	-	-	15%
Slight improvement	-	-	22%
Moderate improvement	-	-	42%
Marked improvement	-	-	22%

- IV. "Roentgen-Ray Observations" — by W. F. Manges and S. J. Hawley, Philadelphia.

1. There are many excellent papers on Roentgen-ray diagnosis of asthma, and very few on treatment, but in all of them excellent results are reported.
2. Infection plays an important part in the majority of cases of bronchial asthma.
3. They emphasize the importance of not making a diagnosis of asthma in cases of F.B. and report cases of this nature.

- V. "Bronchoscopy as an Aid in Diagnosis and Treatment of Bronchial Asthma"—by Louis H. Clerf, Philadelphia.

The conditions found were as follows during the attack:—

1. During the attack marked swelling and turgescence of the mucosa which appeared cyanotic and purple rather than red.
2. The presence of abnormal secretion.
3. Collapse of trachea and bronchi during cough and expiration.
4. Absence of bronchial spasm.
5. Absence of erosion and ulceration.



## COMMENT.

## VI. "Studies in the Etiology of Bronchial Asthma"—by John Eiman, M.D., Philadelphia.

Dr. Eiman states that in these studies he limits himself strictly to the so-called idiopathic or bronchial asthma, also that all these cases had chronic infection either in the bronchi or sinuses or both.

He advances the interesting hypothesis that owing to retention of secretions in the lungs owing to inability of the bronchi to expel the same on account of traumatism due to disease, there may occur a sensitization of the patient from his own secretions or their split up products.

He claims successful results from the use of "Secretion Filtrates" and secretion filtrates combined with "soluble toxins" and bacterins, the greater success coming from the use of the latter.

## VII. "Studies in the Treatment of Asthma"—by H. B. Wilmer, Philadelphia.

His conclusions are:—

1. A case of asthma cannot be successfully treated without careful study, therefore 3-4 days of hospitalization is ideal.
2. Operations should not be performed in allergic cases unless a complete survey is first made as many cases are made worse by too hasty operative procedures.
3. It has been proved that many patients develop a seeming sensitiveness to their own respiratory secretions and when the filtrates derived from these secretions are used subcutaneously marked relief has been experienced in cases otherwise not relieved.
4. Caution should be used in the administration of these filtrates, as severe reactions have been experienced in the form of asthmatic seizures. (The same applies to typhoid protein). Dr. Cadham.
5. One should retest for protein sensitivity as this may vary from day to day.

## COMMENT.

N.B. Class 3 is the class of cases where the best results have been obtained from nasal operations. It seems more logical to remove the source of the lung infections rather than merely to combat the effects by vaccines.

## VIII. "Asthma from the Standpoint of the Rhinologist"—by Edwin McGuinnis, Chicago. (He quotes Bosworth).

1. He was of the opinion that "just so far as we can cure nasal disease we can cure asthma."

2. Karl K. Kroessler and Chandler Walker both have recognized and described two types of asthma.—The first the allergic type and the second the bacterial type so called the bronchial asthmatic type. Kroessler admits there may be mixtures of the two types. (This is right).

3. *The Voltolini Experiment of 1912.*

A physician's wife in the throes of asthma came to consult me on account of blocked nose. Nasal polypi were present and a purulent discharge. A complete removal of these was done and in so doing some of the ethmoid cells were broken down. She came in the next morning for removal of the nasal packs and to my surprise she said she had spent a comfortable night without asthma. She has remained well to the present time (Compare case 13).

## COMMENT.

It seems to me that on the whole Dr. McGuinnis lays too much stress on the ethmoids and not enough on the antra. Refer to paper 1, by Coates and Eisman in which they say that 75% of polyps were secondary to pathological changes in the maxillary antrum. Coates and Eisman confirm by own experience.

Nasal obstruction and hypertrophies play a very subsidiary part in asthma. The important factor is sinus disease, and of these the important one is the antrum of Highmore.

## CONCLUSIONS.

1. In all cases of asthma nose and throat examinations should be made.
2. A certain percentage of cases of asthma respond favorably to nasal operation.
3. The more inclined to the septic type the more favorable the prognosis from the operative standpoint.
4. From my own experience I would say of the different sinuses of the nose the antra are the most important from the asthmatic standpoint.
5. The best results in asthma will probably be secured by close co-operation among the various specialists on the lines of the asthma institute.

## THE TRUE ECONOMY OF DEXTRI-MALTOSE

It is interesting to note that a fair average of the length of time an infant receives Dextri-Maltose is five months: That these five months are the most critical of the baby's life. That the difference in cost to the mother between Dextri-Maltose and the very cheapest carbohydrate, at most is only \$6 for this entire period—a few cents a day: That, in the end, it costs the mother less to employ regular medical attendance for her baby than to attempt to do her own feeding, which in numerous cases leads to a seriously sick baby eventually requiring the most costly medical attendance.

## FRIEDREICH'S ATAXIA

## A CASE REPORT

JOHN M. McEACHERN, M.D. (Man.), F.R.C.P. (C.)

and

ROSS H. COOPER, M.D. (Man.)  
Winnipeg

The patient, a boy age 19, was first seen in April complaining of difficulty in walking. This was first noticed three years ago and has been becoming progressively worse. At the present time he is unable to walk without assistance. There is no history of past illness.

**Family History:** This is of such significance that it will be dealt with later.

**Physical Examination:** Moderately well nourished lad, age 19. There were slight irregular involuntary movements of the head. The eyes react to light and accommodation. There was a slight nystagmus. Lungs, heart and abdomen normal.

**Reflexes:** Knee jerks, completely absent; ankle jerks, absent. Babinski's sign present on both sides. The feet showed typical pes cavus.

**Gait:** Patient walked with a typical ataxic gait requiring support. There was slight involvement of the boy's upper extremities as shown on the incoordination and the clumsiness in executing even the simplest movements.

**Laboratory:** Urinalysis normal, blood count normal in all respects, Blood Wasserman negative, Cerebrospinal fluid, no increased pressure, five lymphocytes, slight increase in albumen.

A tentative diagnosis of Friedreich's Ataxia was made and the family history was investigated.

**Family History:** Both paternal grand parents died at an early age of tuberculosis. Patient's mother died at the age of 52 years of influenza. She was a nervous hysterical type. The father is apparently in good health. Three brothers are living and apparently normal. One sister, 30 years of age, developed symptoms four years ago of a similar nature and was diagnosed "Friedreich's Ataxia" at the Henry Ford Hospital in Detroit. One sister, age 26, living at home, has chorea and is mentally defective.

**Pathology:** The Pathology of this condition is a primary degeneration involving certain neurons in the dorsal column, the pyramidal-tract and the spinal-cerebellar tracts. The dorsal column is the first involved and usually the most pronounced.

**Discussion:** The Family History substantiates the clinical diagnosis, insofar as Friedreich's Ataxia is a familiar disease usually effecting two or more of the same generation. The age of onset varies greatly, some cases being reported at the age of six while others, as in the present case, fail to show symptoms until well past puberty. The Ataxia is the first sign to appear and is progressive.

Romberg's sign may or may not be present. The irregular involuntary movements are quite characteristic. These occur in the limbs when the limb is unsupported. In this respect it differs from Chorea. In advance cases such movements may effect the head, neck, eyes, facial muscles and tongue. There may be impairment of speech similar to that found in disseminated Sclerosis. Sensation is little effected. There may be slight loss to touch, pain and temperature. The limbs are flaccid and atonic due to involvement of the posterior columns.

**Prognosis:** The disease is progressive in a slow irregular fashion and the patient may last for as long

as thirty years, towards the end becoming completely bed-ridden. There is no treatment except that of keeping the patient in as good physical condition as possible, plenty of rest, good nourishing food and fresh air will all help, and the patient must be encouraged to walk as much as possible.

At Your Service—

PARKE, DAVIS  
& COMPANY

THE  
WORLD'S LARGEST  
MAKERS OF PHARMACEUTICAL  
AND BIOLOGICAL PRODUCTS.

*Descriptive literature concerning any of  
our Products will be gladly supplied  
to physicians on request.*

WINNIPEG BRANCH

138 Portage Ave. East

Phone 92 443 92 444

## NEW ADDRESS

J. M. HARVEY, Jr.

Representative

H. G. Fisher &amp; Co. Inc.

X-Ray &amp; Physiotherapy Apparatus

Announce the Opening of their  
New Show Room and Office

211 ENDERTON BLDG.

Phone 22 242

Winnipeg

---

# NATIONAL CONFERENCE

---

**Canadian Public Health Association**

IN CONJUNCTION WITH THE

**Ontario Health Officers' Association**

**Canadian Tuberculosis Association**

**Canadian Social Hygiene Council**

---

## **Date**

Monday, Tuesday and Wednesday, June 3rd, 4th and 5th.

## **Place**

Royal York Hotel, Toronto.

## **Programme**

*Three joint sessions are being arranged.* Among the visiting speakers expected are Surgeon General Cumming of the United States Public Health Service; Dr. E. L. Bishop, Commissioner of Health for the State of Tennessee and President of the American Public Health Association; Dr. C. L. Scamman, Director of the Division of Public Health of the Commonwealth Fund; and Dr. John A. Ferrell, of the International Health Division of the Rockefeller Foundation.

*Nine Section meetings of the Canadian Public Health Association:* Each of the following Sections of the Canadian Public Health Association will provide one or more of the morning sessions: Public Health Engineering, Laboratory, Epidemiology and Vital Statistics, Public Health Nursing, Industrial Hygiene, Mental and Social Hygiene.

*Three special sessions of the Ontario Health Officers' Association* will be held, including a series of demonstrations and the annual round-table dinner conference.

*Clinical and formal sessions of the Canadian Tuberculosis Association* are being planned for each morning.

*Annual Meeting of the Canadian Social Hygiene Council.*

## **Exhibits**

An outstanding feature of the conference will be the extensive scientific and commercial exhibits. Plans are being made to present to health officers practical suggestions for a programme of health education suitable for rural and small urban municipalities. The exhibits will be under the joint auspices of the four associations.

**MAKE YOUR PLANS NOW!**

---



---

---

## Editorial and Special Articles

---

---

### The Manitoba Medical Association Review

*Formerly the Bulletin of the Manitoba Medical Association*

ESTABLISHED 1921

---

WINNIPEG, MAY, 1935

---

*Published Monthly by the*  
MANITOBA MEDICAL ASSOCIATION

*Editorial Office*  
101 MEDICAL ARTS BUILDING, WINNIPEG

---

*Editor*  
C. W. MACCHARLES, M.D. (MAN.)

*Advisory Editor*  
ROSS B. MITCHELL, B.A., M.D., C.M. (MAN.),  
F.R.C.P. (C.)

*Business Manager*  
J. GORDON WHITLEY  
Annual Subscription - \$2.00

---

*Editorial or other opinion expressed in this Review is not necessarily  
sanctioned by the Manitoba Medical Association.*

---

[COPYRIGHT]

---

---

## OBITUARY

---

Dr. T. Glendenning Hamilton, pioneer in the West for more than fifty years, and an international figure in psychic research, died of angina pectoris in the Winnipeg General Hospital on April 7th, aged sixty-one. Born in Agincourt, Ontario, Glen Hamilton came with his parents in 1883 to a homestead on what is now the site of Saskatoon. One of his early memories was the hospitality shown by his father to convalescent soldiers of the '85 rebellion on the Saskatchewan. In 1891 his widowed mother brought her family to Winnipeg to secure better education. The young man entered the Winnipeg Collegiate and later Manitoba Medical College, graduating in 1903. After an interne year in the Winnipeg General Hospital, he began practice in Elmwood, and continued to practise in that suburb until his death.

He was Lecturer in Clinical Surgery in the Medical Faculty of the University of Manitoba, a member of the Surgical Staff of the Winnipeg General Hospital, Secretary and then President of the Manitoba Medical Association (1921-22), member of the Executive Committee of the Canadian Medical Association from 1922 to 1931, and Chair-

man of the Committee on Constitution and By-Laws. As Secretary of the Manitoba Medical Association, he was the prime mover in the establishment of the *Manitoba Medical Association Bulletin*, now the *Review*, which first appeared in July, 1921.

From 1915 to 1920 he was a member of the Manitoba Legislative Assembly and was active in the passage of Mothers' Allowance legislation. For several years he represented Elmwood on the Winnipeg Public School Board and served as Chairman of the Board. For twenty-eight years he was an elder of King Memorial Church.

Considerable as these achievements were, it was his investigation of psychic phenomena that made him so widely known. His researches, begun in 1918 and continued up to his death, brought him into contact with notable world figures such as Sir Arthur Conan Doyle, who attended a séance in Dr. Hamilton's home, Sir Oliver Lodge, and Dr. and Mrs. Crandon (Marjory) of Boston. In 1930, when the British Medical Association met in Winnipeg, he addressed a large meeting of the delegates. Two years later he lectured on psychic research at Toronto, at Carnegie Hall in New York, and at Washington. His experiments in psychic energy, conceived on strictly scientific lines and his conclusions from those experiments, were being put into a book which was not completed before his untimely death.

Dr. Hamilton is survived by his widow, who aided him greatly in his experiments, two sons, Dr. Glen F. and James D. Hamilton, and a daughter, Mrs. James R. Bach, of London, Ontario.

The esteem and affection felt for the beloved family physician were shown in the gathering which thronged King Memorial Church at his funeral.

---

### AN APPRECIATION

---

With the passing of Glen Hamilton, a notable figure is withdrawn from the life of Winnipeg. What men put into life is much more important than what they attempt to take out of it. By speech, by action, and by example during the last thirty years, Hamilton gave without counting the cost.

The most striking of his many qualities was his straightforward honesty. In virtue of this, he had to follow the gleam wherever it beckoned. Careless of criticism, he pursued his way, conscience his only mentor. Such men are rare — and precious.

# JOINT MEETING

## Ontario Medical Association and Manitoba Medical Association

Fort William and Port Arthur  
May 28 - 31, 1935

### Business Sessions

#### TUESDAY, MAY 28th, 1935

- 10.00 a.m. Meeting of Board of Directors.  
11.00 a.m. Meeting of Council.  
12.30 p.m. Luncheon. Speaker: The Hon. Dr. J. A. Faulkner, Minister of Health, Province of Ontario.  
2.30 p.m. Meeting of Council.  
6.00 p.m. Meeting of Nominating Committee.  
7.15 p.m. Dinner, followed by Round Table Conference, conducted by Committee on Inter-Relations.

#### WEDNESDAY, MAY 29th, 1935

Luncheon Speaker:  
DR. J. C. GILLIE, President-Elect  
Ontario Medical Association.

#### THURSDAY, MAY 30th, 1935

Luncheon Speaker:  
PRESIDENT SMITH  
University of Manitoba.

### Public Meetings

#### WEDNESDAY EVENING, MAY 29th

##### Fort William:

Chairman—Dr. G. W. Rogers, Dauphin, President, Manitoba Medical Association.

Speakers—Dr. A. T. Mathers, Winnipeg: "Childhood and Adolescence."  
—Dr. A. Grant Fleming, Montreal: "What is Health Insurance?"

##### Port Arthur:

Chairman—Dr. J. C. Gillie, Fort William, President-Elect, Ontario Medical Association.

Speakers—Dr. Roscoe Graham, Toronto: "Cancer."  
—Dr. D. A. Stewart, Ninette: "Progress of Medicine in the Last Fifty Years."

### Suggested Arrangement of Speakers

#### WEDNESDAY, MAY 29th

Morning—9.15 to 11.30

##### SECTION "A"

Dr. W. A. Jones, Kingston — "The Anatomical and Radiological Consideration of the Intervertebral Discs."

Dr. G. F. Watson, Kitchener — "Splenic Extracts in Treatment of Tuberculosis."

Dr. Norman M. Guiou, Ottawa — "The Surgery of Pregnancy."

Dr. B. T. McGhie, Toronto—"Schizophrenic Reaction-Types."

Dr. L. Y. McIntosh, Fort William — "Hysteria - Its Psychological Significance."

##### SECTION "B"

Dr. H. A. Dixon, Toronto — "Diagnosis of Syphilitic and Non-Syphilitic Eruptions."

Dr. W. P. Tew, London—"The Significance of Menopausal Bleeding."

Dr. W. T. Connell, Kingston—"Acute Encephalitis and Its After-Effects."

Dr. F. A. Brockenshire, Windsor—"The Necessity of Early Treatment in Congenital Dislocation of the Hip, Club Feet and Birth Palsy" (lantern slides).

Dr. P. M. Ballantyne, Port Arthur — "The Use of Kurschner's Wire in Treatment of Fractures of the Shaft of the Femur."

##### Afternoon—2.15 to 4.00

Dr. J. B. Collip, Montreal—"Gynæcological and Obstetrical Applications of Endocrinology."

Dr. Jas. Miller, Kingston—"Some Practical Points in Relation to Breast Tumours."

Dr. Wilder G. Penfield, Montreal — "Headache, the Mechanism and Radical Treatment of Certain Varieties."

Dr. P. P. Vinson, Mayo Clinic, Rochester—"Malignant Diseases of the Tracheobronchial Tree."

Dr. J. K. McGregor, Hamilton — "The Treatment of Peritonitis."

#### THURSDAY, MAY 30th

Program Supplied by Manitoba Medical Association

Morning—9.15 to 11.30

##### SECTION "A"

"Gallbladder in Relation to Angina Pectoris"—C. R. Gilmour, M.D., C.M. (McG.), F.R.C.P. (C.), Professor of Medicine and Clinical Medicine and Director of the Department of Internal Medicine, University of Manitoba; Physician to the Winnipeg General Hospital.

"Lip and Oral Cancer" — M. R. MacCharles, M.D., C.M. (Man.), F.R.C.S. (Edin.), F.R.C.S. (C.), Lecturer in Clinical Surgery, University of Manitoba; Associate Surgeon to the Winnipeg General Hospital; and

J. Currie McMillan, M.D. (Man.), F.R.C.P. (C.), Lecturer in Medicine (Roentgenology and Electro-Therapeutics), University of Manitoba; Radiologist to the Winnipeg General Hospital.

"Pituitary Tumours and Vision"—H. O. McDiarmid, M.D. (Man.).

"Erythræmia"—Lennox G. Bell, BSc., M.D. (Man.), M.R.C.P. (Lond.), Lecturer in Medicine, University of Manitoba; Assistant Physician to the Winnipeg General Hospital.

"Appendectomy without Relief of Symptoms"—C. E. Corrigan, B.A., M.D. (Man.), F.R.C.S. (Eng.), Demonstrator in Medicine and Clinical Surgery in charge of Out-Patient Department of St. Boniface Hospital.

#### SECTION "B"

"Gallbladder"—J. A. Gunn, C.B., O.B.E., B.A., M.D. (Man.), F.R.C.S. (C.), Professor of Surgery, University of Manitoba; Surgeon to the Winnipeg General Hospital.

"Rheumatic Infection of Childhood"—Gordon Chown, O.B.E., B.A., M.D., C.M. (Man.), F.R.C.P. (C.), Assistant Professor of Medicine (Pediatrics), University of Manitoba; Physician to the Winnipeg Children's Hospital.

"Intra-Cranial Injury in Labour"—Fred G. McGuinness, M.D., C.M. (Man.), B.A.O. (Dub.), F.R.C.S. (C.), Assistant Professor of Obstetrics, University of Manitoba; Associate Obstetrician to the Winnipeg General Hospital.

"Neuro-Syphilis"—S. C. Peterson, M.D. (Man.), Demonstrator in Urology, University of Manitoba; Director of Manitoba Venereal Disease Clinic, St. Boniface Hospital; and J. C. Hossack, M.D., C.M. (Man.), Lecturer in Medicine, University of Manitoba.

"Diagnosis of Gastric Lesions; with Special Reference to Gastroscopic Examination"—P. H. T. Thorlakson, M.D., C.M. (Man.), F.R.C.S. (C.), Lecturer in Clinical Surgery, University of Manitoba; Associate Surgeon to the Winnipeg General Hospital.

#### Afternoon—2.15 to 4.00

"The Cardiac Neuroses"—A. T. Mathers, M.D., C.M. (Man.), F.R.C.P. (C.), Associate Professor of Medicine and Dean of the Faculty of Medicine, University of Manitoba.

"The Mechanics of the Spinal Column"—A. Gibson, M.A., M.B., Ch.B. (Edin.), F.R.C.S. (Eng.), F.R.S.C., Associate Professor of Clinical Surgery and Lecturer in Applied Anatomy, University of Manitoba; Orthopædic Surgeon to the Winnipeg General Hospital.

"The Decalcifying Diseases of the Bone"—William Boyd, M.D., M.R.C.P. (Edin.), F.R.C.P. (Lond.), Dipl. Psych., F.R.S.C., Professor of Pathology, University of Manitoba; Pathologist to the Winnipeg General Hospital.

"The Community and Tuberculosis"—D. A. Stewart, B.A., M.D. (Man.), LL.D. (Man.), F.R.C.P. (C.), Medical Superintendent, Manitoba Sanatorium, Ninette, Manitoba.

#### FRIDAY, MAY 31st

#### Morning—9.15 to 11.30

#### SECTION "A"

Dr. Warner Jones, Toronto — "Prostatic Obstruction and Treatment."

Dr. Almon A. Fletcher, Toronto—"Chronic Arthritis."

Dr. Alan Brown, Toronto—"Functional Nervous Disorders in Children."

Dr. Geo. S. Young, Toronto—"The Elements of Good Case History-Taking."

Dr. J. C. McClelland, Toronto—"Nephropexy—Its Indications and Treatment."

#### SECTION "B"

Dr. F. J. H. Campbell, London — "Treatment of the Common Cold"

Dr. R. I. Harris, Toronto—"The Diagnosis and Treatment of Bone Tumours."

Dr. J. H. Duncan, Sault Ste. Marie—"The Pituitary Gland and Its Clinical Significance."

Dr. W. R. Campbell, Toronto — "Obesity and Its Treatment."

#### Afternoon—2.15 to 4.00

Dr. Roscoe R. Graham, Toronto—"Abdominal Surgical Emergencies in General Practice."

Dr. J. Garfield Dwyer, New York—"Para-Nasal Sinusitis."

Dr. J. C. Meakins, Montreal—"Assessment of Renal Damage and Function."

Dr. J. C. Masson, Mayo Clinic, Rochester—"Repair of the Pelvic Floor."

Dr. John Oille, Toronto—"The Treatment of Heart Disease."

### COLLEGE of PHYSICIANS and SURGEONS of MANITOBA

#### 1. Re. Changes of Address.

In order that your Council may be of assistance to the individual members of the profession, it is desirable that any change of address, whether temporary or permanent, should be communicated to the Registrar.

#### 2. Re. Bureau of Service.

If the doctors visiting the city would kindly take the trouble to notify the Registrar of their address while here, there is no doubt considerable assistance could be given to them, as this office frequently receives inquiries of where Doctor So and So can be found. These inquiries are always for important business, and the Registrar's office would be only too pleased to assist so far as it can, in rendering the desirable service to the individuals concerned.

#### 3. Re. Life Membership to the College.

May I again draw the attention of the profession to the announcement made some time ago, that registered members who have been practicing in the province thirty consecutive years, were sixty-five years of age or over, and were of good standing regarding the payment of their dues, were eligible to receive a certificate of Life Membership with the College of Physicians and Surgeons of Manitoba. Would any entitled to this privilege, kindly communicate with the Registrar?

#### 4. Re. Restorations to Register.

The Council wish to announce that the names of the two members who were recently removed from the Register have been reinstated, and are in good standing.

W. G. CAMPBELL, Registrar,  
C. P. & S. of Manitoba.



# PUBLIC HEALTH BIOLOGICAL PRODUCTS

Diphtheria Antitoxin★  
Diphtheria Toxin for Schick Test★  
Diphtheria Toxoid (*Anatoxine-Ramon*)★  
Scarlet Fever Antitoxin★  
Scarlet Fever Toxin for Dick Test★  
Scarlet Fever Toxin★  
Tetanus Antitoxin★

---

Anti-Meningococcus Serum★  
Anti-Pneumococcus Serum (*Type 1*)  
Anti-Anthrax Serum  
Normal Horse Serum

---

Smallpox Vaccine★  
Typhoid Vaccine★  
Typhoid-Paratyphoid Vaccine★  
Pertussis Vaccine  
Rabies Vaccine (*Semple Method*)★

---

INSULIN★ and LIVER EXTRACT

---

## Connaught Laboratories

*University of Toronto*

Toronto 5       -       -       Canada

*Depot for Manitoba*

BRATHWAITES LIMITED, WINNIPEG

★ For use in the Province of Manitoba, products marked with an asterisk (★) in the above list are available to physicians and hospitals free of charge, upon application to the Provincial Department of Health and Public Welfare. This provision, in the case of Insulin, extends only to supplies of the product required by patients unable to pay therefor.

# Department of Health and Public Welfare

## NEWS ITEMS

**SCHOOL HEALTH EXAMINATION:** Now that spring is here many rural doctors will be carrying out as part of their duties as Medical Officers of Health the examination of school children. The following article, taken from the official publication of the Tennessee Department of Public Health, we believe sets out very well just what an examination should be. We would recommend it to all physicians who have this type of work to do:—

The object of the school health examination is to point out to the parent, the teacher, and the child defects in the child and to assist the parent and teacher in securing correction of defects.

Without a sound body it is not impossible but highly improbable that the child will develop a sound mind. It is certainly true that he will not enjoy a well-balanced, well-rounded life and that he will not derive the most benefit from the year spent in school.

The law requires that the child be sent to school, and it is only right that his health be protected while at school. Also, it is highly important that he be taught the importance of a sound body. This the department of health, with the hearty co-operation of the department of education, is trying to do.

A properly conducted health examination at school includes the following:

1. **Careful weighing and measuring of the school child.** There is no accurate "thumb rule" by which one can say that a particular child is below normal weight for a given age and height; however, no child should remain stationary for any long period of time. Seasonal variations can be expected. The important thing is to record the findings and upon subsequent examinations check on the progress made by each child. On the other hand, the parent should bear in mind the fact that bulk is not necessarily a sign of health. The fat child or even the child of so-called normal weight may not be receiving the right kind of food and may show signs of malnutrition.

2. **Posture.** While weighing and measuring the child the experienced examiner will note the posture. When not due to inheritance or bony deformity, poor posture may be taken as a state of mind and a sign of some defect in the body or of general weakness due to faulty diet or other conditions of bad hygiene.

3. **Eyes.** The importance of the eyes of a school child can hardly be over stated. The examiner will already have received from the teacher a list of children thought to be in need of especial attention and in most instances if school has been going on for any length of time most of the children with defective eyes will be known to the teacher. If this list is not furnished the examiner inquires of the teacher which, if any, of the pupils hold their books close to the eyes, lean forward when viewing work on the black board, complain of headache and blurred vision, or have pain in eyes, inflamed lids, etc.

The examiner makes a careful examination of the eyes—noting the lids, the position of each eye, the size of the pupils and their reaction to light and finally the vision of each eye is tested separately at a standard distance with a standard test chart.

4. **Ears.** Next to vision, from a purely academic point of view, the hearing of a child is of great importance. No examination is complete until each ear has been tested from a standard distance with a small mechanical instrument designed to produce a standard sound. Next the physician should look into each ear with a lighted instrument designed especially for the purpose.

5. **Skin.** Careful examination is made to determine the presence or absence of the usual infectious or parasitic skin diseases. The scalp and hair are included in this examination. The most common diseases of the skin are ringworm, impetigo (commonly called fall sores) and scabies or the itch. The most common parasitic infestation seen in the hair is that little creature made famous by Burns, and it should be remembered that he saw it on a "lady's bonnet." If pediculi are found on one child and that child allowed to go without notice one-third or more of the room will soon be infested.

6. **Glands.** Lymph glands commonly referred to as "kernels," are carefully examined for soreness and increase in size. This will lead the examiner to suspect some acute infection in the region drained by these glands or a deep seated chronic infection.

7. **Thyroid.** Careful observation is made for any enlargement of this gland. It is located in the hollow of the neck just above the breast bone. Next, the fingers are placed over the gland and it is carefully palpated to determine its position and consistency. An abnormal enlargement of this gland is usually referred to as a goiter and it should receive especial attention in girls just before and during puberty.

8. **Nose.** Examined closely for obstructions and if any, the cause ascertained.

9. **Teeth and Oral Hygiene.** Where possible, the teeth and gums should be examined by a dentist. If the physician finds one cavity he has sufficient cause to refer the child to a dentist and the dentist will then make a thorough examination of all teeth. Decay of the first teeth will produce abscesses and cause pain and impairment of health just as much as it will in permanent teeth. The statement that a clean tooth never decays is an exaggeration, but there is every reason to believe that it is less apt to decay than a dirty one. Therefore, the child should be taught to brush teeth and gums at regular intervals and if necessary visit the dentist and have them cleaned.

10. **Tonsils.** Simply because a child has tonsils is no excuse for having them removed, but a diseased tonsil is a decided menace to its possessor. Also, the size of the tonsil is not necessarily an index as to its diseased condition. It should be remembered that all contagious diseases involving the upper respiratory tract begin either with a cold in the nose or a sore throat or both. A child seen in school with a red throat or cold may have scarlet fever or diphtheria the next day. If parents do not keep such children at home, then they should be sent home as soon as the condition is discovered in school.

11. **Lungs.** It is difficult to make a satisfactory examination of a child's lungs, especially in school. Therefore, if there is any reason to suspect an abnormal condition in the lungs, the record should be so marked and the child referred to his physician for especial examination.

12. **Heart.** The heart can and should be carefully examined. If any trouble is found the examiner should be careful that the child does not suspect it. A note sent to his parents should be sufficient to cause them to carry him to their physician without delay.

13. **Orthopedic conditions** requiring special attention are many and varied. Many of them seen by the examining physician are of such a nature that complete cure is impossible. However, many children born with deformities or crippled in early life go through life branded as cripples simply because they have been neglected.

The school health examination is carefully recorded and the record preserved in the office of the county

health department. The record is designed to care for the child during his eight years in elementary school. Besides the examination, there is space for recording the immunity status of typhoid fever, diphtheria, and smallpox. Also, space for recording notes on clinical, conference, field visits, and special recommendations. On subsequent examinations the same record is used and corrections noted.

Parents are urged to attend the school health examination and whether present or absent they are given or sent a notice of defects found in their child and urged to take the child to the physician of their choice for correction of defects.

After sufficient time has elapsed for corrections to be made the school nurse or county health nurse calls at the home and if corrections have not been made or the child has not been taken to his physician, the dangers of delay are pointed out and the parents again urged to see their physician.

### NATIONAL HEALTH CONFERENCE

Canadian Public Health Association, in conjunction with the Ontario Health Officers' Association, Canadian Tuberculosis Association and Canadian Social Hygiene Council.

**DATE** — Monday, Tuesday and Wednesday, June 3rd, 4th and 5th.

**PLACE**—Royal York Hotel, Toronto.

**PROGRAM** — Three joint sessions are being arranged. Among the visiting speakers expected are Surgeon General Cumming of the United States Public Health Service; Dr. E. L. Bishop, Commissioner of Health for the State of Tennessee and President of the American Public Health Association; Dr. C. L. Scamman, Director of the Division of Public Health of the Commonwealth Fund; and Dr. John A. Ferrell, of the International Health Division of the Rockefeller Foundation.

Nine Section meetings of the Canadian Public Health Association: Each of the following Sections of the Canadian Public Health Association will provide one or more of the morning sessions: Public Health Engineering, Laboratory, Epidemiology and Vital Statistics, Public Health Nursing, Industrial Hygiene, Mental and Social Hygiene.

Three special sessions of the Ontario Health Officers' Association will be held, including a series of demonstrations and the annual round-table dinner conference.

Clinical and formal sessions of the Canadian Tuberculosis Association are being planned for each morning.

Annual Meeting of the Canadian Social Hygiene Council.

**EXHIBITS**—An outstanding feature of the conference will be the extensive scientific and commercial exhibits. Plans are being made to present to health officers practical suggestions for a program of health education suitable for rural and small urban municipalities. The exhibits will be under the joint auspices of the four associations.

**MAKE YOUR PLANS NOW!**

### COMMUNICABLE DISEASES REPORTED

Urban and Rural : March, 1935

Occurring in the Municipalities of:—

**Measles:** Total 643—Unorganized 103, Winnipeg 101, Cameron 43, Minnedosa 35, The Pas 35, Pilot Mound 27, Swan River Town 27, Whitewater 27, Shoal Lake Village 24, Hartney 16, Louise 15, Dauphin Town 10, Flin Flon 10, Lawrence 10,

Hamiota Rural 8, Whitemouth 8, Boissevain 7, Hamiota Village 7, Mossy River 7, Russell Town 7, St. Boniface 6, Virden 6, St. Clements 5, Plum Coulee 4, Silver Creek 4, Swan River Rural 4, Dauphin Rural 3, Ste. Rose du Lac Village 3, Brandon 2, Charleswood 2, Ethelbert 2, Morris Rural 2, St. Vital 2, Thompson 2, Armstrong 1, Birtle Rural 1, Ellice 1, Hanover 1, Lac du Bonnet 1, Morton 1, Shellmouth 1, St. James 1. Late reported: February—The Pas 37, Minnedosa 11, Shoal Lake Village 7, Dauphin Rural 3, Dauphin Town 1, Pilot Mound 1, Strathclair 1.

**Mumps:** Total 255—Winnipeg 227, St. Vital 18, Kildonan North 5, Kildonan East 3, Brooklands 1, St. James 1.

**Chickenpox:** Total 254 — Winnipeg 158, Selkirk 13, Thompson 8, Lorne 8, St. Andrews 5, Lac du Bonnet 4, St. Vital 3, Brandon 2, Norfolk South 2, Shellmouth 2, St. James 2, Charleswood 1, Portage City 1, Siglunes 1, Unorganized 1. Late reported: January—Charleswood 16; February—Charleswood 14, Thompson 7, Eriksdale 6.

**Whooping Cough:** Total 128 — Winnipeg 112, Unorganized 4, Kildonan East 3, Silver Creek 2, St. Boniface 2, Transcona 2, Boissevain 1, Kildonan West 1, St. Clements 1.

**German Measles:** Total 94 — Foxwarren Village 42, Binscarth 33, Unorganized 8, Ellice 5, Russell Rural 4, Sifton 1, St. Boniface 1.

**Scarlet Fever:** Total 76—Winnipeg 31, Norfolk South 9, Ste. Rose Rural 6, Fort Garry 5, Pembina 3, St. Boniface 3, Gimli Rural 2, Kildonan East 2, Rosedale 2, Strathclair 2, Transcona 2, Charleswood 1, Hamiota Rural 1, Montcalm 1, Rhineland 1, Roland 1, Selkirk 1, Stonewall 1, Ste. Rose du Lac Village 1, St. Vital 1.

**Tuberculosis:** Total 28 — Winnipeg 9, Ritchot 2, St. Anne 2, Carberry 1, Coldwell 1, Dauphin Rural 1, Dauphin Town 1, Franklin 1, Kildonan East 1, Morris Rural 1, Norfolk North 1, Pilot Mound 1, Rhineland 1, Springfield 1, Stonewall 1, Strathclair 1, St. James 1 Unorganized 1.

**Diphtheria:** Total 23—Winnipeg 15, Morris Rural 3, Carman 1, Kildonan East 1, Rhineland 1. Late reported: January—Morris Rural 1; February—Morris Town 1.

**Erysipelas:** Total 9—Winnipeg 3, St. Boniface 2, St. Vital 2, Hanover 1, Transcona 1.

**Influenza:** Total 8 — Late reported: January—Grandview Town 1, Kildonan West 1, Lorne 1, Manitou 1, Minnedosa 1, Mossy River 1, Ste. Anne 1, St. Boniface 1.

**Typhoid Fever:** Total 2—St. Laurent 1, Woodlands 1.

**Septic Sore Throat:** Total 1—Late reported: January—Franklin 1.

**Diphtheria Carrier:** Total 1—St. Boniface 1.

**Veneral Diseases:** Total 99—Gonorrhoea 68, Syphilis 31.

### DEATHS FROM ALL CAUSES IN MANITOBA

For the Month of February : 1935

**URBAN**—Cancer 26, Tuberculosis 15, Pneumonia (all forms) 7, Influenza 3, Puerperal 3, Cerebro spinal meningitis 2, Measles 1, Whooping Cough 1, Venereal Disease 1, all others under one year 4, all other causes 123, Stillbirths 23. Total 209.

**RURAL**—Pneumonia (all forms) 31, Cancer 26, Tuberculosis 16, Measles 4, Influenza 3, Diphtheria 3, Puerperal 3, Whooping Cough 3, Typhoid Fever 2, Venereal Disease 2, Erysipelas 1, all others under one year 6, all other causes 160, Stillbirths 20. Total 280.

**INDIANS:** Tuberculosis 13, Pneumonia (all forms) 6, Measles 5, Whooping Cough 3, all others under one year 5, all other causes 7. Total 39.



## Clothing

of distinction for  
the professional man.

### Men's Clothing

Ready-To-Wear, and Made-To-Measure by Canada's Best Tailors. Priced from \$23.50 to \$50.00.

### Hats Shirts Furnishings

In a choice range of Spring and Summer styles and quality materials.

Agents for

## Burberrys

London, Eng.

## McCreerys Ltd.

293 Portage Ave.

Winnipeg

One Door East of Capitol Theatre

**FOR SALE—DOCTOR'S GOWN**  
and M.D., C.M. Hood (Man.), in perfect condition; made by Forsyth of Edinburgh; price reasonable. — Enquire at Medical College office.

## Your Furs . . . Remodelled

Have your fur coat remodelled to the New Fall Styles by an expert furrier. To-day's quotations

are considerably lower than it will be possible to obtain in the Fall.



## Repaired

Summer prices on repairing are exceptionally reasonable. Workmanship, and all material used are unconditionally guaranteed.

**Stored** For only 2% of your own valuation, your furs are stored and insured against fire, burglary, and moths, while in our possession.

Estimates furnished on request without obligation.

## The MORRIS FUR CO.

280 Kennedy St.

Winnipeg

Work Called for and Delivered

Phone 22 553

## Quality Flowers

*The Orchid*

Victor L. Scott

Phone 87 971 - 80 887

311 DONALD STREET

## NATURAL TREAD SHOES — The Shoe That "Reason" Built



White Kid  
Black Kid  
Brown Kid

### "BETTER FOR HEALTH"

We aim to give a shoe which conforms to nature in that it gives freedom of movement, proper balance to the body (particularly to the back) and at the same time combines good appearance with comfort.

The Natural Tread Shoe is the result of much observation and research covering many years.

**Life Extension Institute Says** "Disturbance due to weak feet are manifold."

**Wear Natural Tread Shoes.** Approved by medical profession everywhere.

For Men and Women.

## Affleck Shoe Store

319 Portage Ave.

Winnipeg

## Manitoba Nurses' Central Directory

300 Power Building Phone 27 700

### OFFERS HOURLY NURSING CARE

At \$1.25 for First Hour and 75c for each succeeding hour for any type of nursing care needed in the home.

All Services Rendered by Registered Nurses.

**An 8-Hour Day at \$3.00 per Day**

## SCILEXOL

(E. B. S.)

*An Efficient Expectorant, Respiratory Sedative and Anodyne.*

### Each Fluid Ounce Contains:

Codeine Phosphate .....	1 grain
Ammonium Chloride .....	16 grains
Chloroform .....	2 minims
Acid Hydrocyanic Dil. B.P. ....	4 minims
Syr. Scillae .....	90 minims
Syr. Tolu. ....	120 minims

(Dose—One to two Fluid Drachms)

Also supplied with Heroin 1/3 grain to ounce instead of Codeine.

*Sample on Request.*

Indicated in Sub-Acute and Chronic Bronchitis, Asthma, General Colds, Whooping Cough, etc.

### A Few E. B. S. Specialties

Bromatol	Glyco Tonic
Codasal, C.T. No. 248	Hemroydine
Codophen, C.T. No. 260	Rheumatol
Digestophos	Rheumatol Ointment
Dilaxol	Hormonal Capsules
Dilaxol, Powder Form	Theobarb, C.T. No. 691

The  
E. B. Shuttleworth Chemical Co.  
Limited

MANUFACTURING CHEMISTS

TORONTO CANADA

A representative Stock of E. B. S. products  
carried by

CAMPBELL & HYMAN, LTD.  
262 Edmonton Street  
Winnipeg Manitoba

## Harris's Yerba Mate Tea

A delightful beverage, free from tannic acid. Containing caffeine, iron, manganese, copper, and chlorophyll. Vitamins A. B. C. Recommended where astringent beverages cannot be taken. Also as an aid for constipation, nervous and digestive disorders.

Obtainable at  
Hudson's Bay Co. and Eaton's Grocery Depts.

## The Winnipeg Drug Co., Limited

*Prescription Specialists*

### Agents for

- Mulford's Biologicals
- Nicholson's Vaccines
- Cutter's Vaccines
- Cutter's Poison Ivy Serum (Hypodermic)
- Cutter's Poison Ivy Extract (Oral)

We Specialize in Prescription Work  
and Stock the Most Recent Drugs  
and Medicinal Specialities.

MAIL ORDERS PROMPTLY EXECUTED.  
FREE MESSENGER SERVICE.

## The Winnipeg Drug Co., Limited

407 PORTAGE AVENUE, at Kennedy St.

Phone  
21-621

## Medical Business Bureau

101 Medical Arts Bldg. Winnipeg

COLLECTION of ACCOUNTS  
PUBLIC STENOGRAPHY  
AUDITING and BOOKKEEPING

J. L. HEWITT, Manager.

Doctors recommend it!  
Hospitals advise it!  
Patients ask for it!

## Drewry's Dry Ginger Ale

3 Sizes: 6-oz. — 12-oz. — 28-oz.

## McLean Printers

*Printers of "The Review"*

Kelvin and Hart -:- WINNIPEG

Phone 501 122

## Medical Library University of Manitoba

Each month we have published a summary of the contents of some of the journals available to practitioners. The list has been compiled by T. E. HOLLAND, B.Sc., M.D. (Man.), F.R.C.S. (Edin.), and the intention has been to refer particularly to articles which would be of interest to general practitioners. This month, instead of the usual review, there is published for reference a list of the journals regularly received in the library.

Académie de médecine, Paris;—Bulletin.  
Acta chirurgica Scandinavica.  
Acta medica Scandinavica.  
American academy of pediatrics;—Transactions.  
American college of surgeons, Chicago;—Bulletin.  
American dietetic association;—Journal.  
American heart journal.  
American journal of anatomy.—Dept. A.  
American journal of cancer.  
American journal of diseases of children.  
American journal of hygiene.  
American journal of obstetrics & gynaecology.  
American journal of ophthalmology.  
American journal of pathology.  
American journal of physical anthropology. — Dept. A.  
American journal of physiology.—Dept. Ph.  
American journal of public health.  
American journal of roentgenology & radium therapy.  
American journal of surgery.  
American journal of syphilis.  
American journal of the medical sciences.  
American journal of tropical medicine.  
American laryngological, rhinological & otological soc. (inc)—Trans.  
American medical assoc;—Journal.  
American otological society; (New Bedford)—Transactions.  
American pediatric society;—Transactions.  
American review of tuberculosis & abstracts of tuberculosis.  
American society for the control of cancer;—Bulletin.  
American surgical association;—Transactions.  
American urological association (Western Branch Soc.)—Trans.  
Annales de l'institut Pasteur. —See  
L'institut Pasteur; Paris.—Annales.  
Anatomical record.—Dept. A.  
Anatomischer anzeiger.—Dept. A.  
Anatomischer bericht.—Dept. A.  
Anesthesia and analgesia, Current researches in—  
Annales d'anatomie pathologique et d'anatomie normale méd.-chirurg.—Dept. Pa.  
Annales de médecine.  
Annals of internal medicine.  
Annals of medical history.  
Annals of otology, rhinology & laryngology.  
Annals of surgery.  
Archiv für die gesamte physiologie des menschen u. der tiere. —See

Pfugler's Archiv. f.d. gesamte physiologie . .  
der tiere.

Archives of dermatology and syphilology.  
Archives of disease in childhood.  
Archives of internal medicine.  
Archives of medical hydrology.  
Archives of neurology and psychiatry.  
Archives of ophthalmology.  
Archives of oto-laryngology.  
Archives of pathology.  
Archives of pediatrics.  
Archives of surgery.  
Association of American medical colleges;—  
Journal.  
Association of American physicians, Philadelphia; —Transactions.  
Australian & New Zealand journal of surgery.  
Australian journal of experimental biology & medical science.

The Bookseller.

Brain; a journal of neurology.  
British journal of children's diseases.  
British journal of dermatology & syphilis.  
British journal of experimental pathology.—  
Dept. Pa.  
British journal of ophthalmology.  
British journal of radiology.  
British journal of surgery.  
British journal of tuberculosis.  
British journal of urology.  
British Medical journal.  
Bulletin de l'académie de médecine, Paris. —See  
Académie de médecine; Paris.—Bulletin.  
Bulletin de la société de chimie biologique. —See  
Société de chimie biologique; Paris.—  
Bulletin.  
Bulletin de la soc.des sciences méd. et biol. de  
Montpellier et du Languedoc Mediterranen.  
—See  
Société des sciences méd. et biol. de Mont-  
pellier et du Languedoc Mediterranen; —  
Archives.  
Bulletin of the American college of surgeons,  
Chicago. —See  
American college of surgeons, Chicago;—  
Bulletin.  
Bulletin of the Association of American medical  
colleges. —See  
Association of the American medical colleges;  
—Bulletin.  
Bulletin of the American society for the control  
of cancer. —See  
American society for the control of cancer;  
—Bulletin.  
Bulletin of the Johns Hopkins hospital. —See  
Johns Hopkins hospital;—Bulletin.  
Bulletin of the medical library association. —See  
American library association;—Bulletin.  
Bulletin of the New York academy of medicine.  
—See  
New York academy of medicine;—Bulletin.



- Bulletin of the neurological institute of New York. —*See*  
Neurological institute of New York;—  
Bulletin.
- Bulletin of the New York city Lying-in hospital. —*See*  
New York city Lying-in hospital;—Bulletin.
- Bulletin of the school of medicine, University of Maryland; Baltimore. —*See*  
Maryland; University; Baltimore. School of medicine;—Bulletin.
- Bulletins et mémoires de la société des chirurgiens de Paris. —*See*  
Société des chirurgiens de Paris;—Bulletins et mémoires.
- Bulletins et mémoires de la société médicale des hôpitaux de Paris. —*See*  
Société médicale des hôpitaux de Paris; —  
Bulletins et mémoires.
- The Caduceus. (Hong Kong).
- Canadian dental assoc.—Journal.
- Canadian journal of research.
- Canadian medical association journal.
- Canadian public health journal.
- Central States pediatric society;—Transactions.
- Chinese journal of physiology;—Dept. Ph.
- Clinical journal.
- Clinical science, incorporating Heart.
- College of physicians of Philadelphia;—Transactions.
- Comptes rendus des séances de la société de biologie, Paris. —*See*  
Société de biologie; Paris.—Comptes rendus des séances.
- Cumulative book index.
- Current researches in anesthesia and analgesia. —*See*  
Anesthesia and analgesia,—Current researches in.
- Deutsche medizinische wöchenschrift.
- The Diplomat.
- Edinburgh medical journal.  
Contains Edinburgh med.-chir. soc. Trans. and  
Edinburgh Obstetrical soc. Trans.
- Endocrinology.
- Endokrinologie.
- Glasgow medical journal.
- Great Britain. Medical research council; Special report series.
- Guy's hospital reports.
- Harvey Society, New York; The Harvey lectures.
- Henry Phipps institute; Philadelphia. Annual report for the study, treatment and prevention of tuberculosis.
- Hygeia (American medical assoc.).
- Indian journal of medical research.
- L'institut Pasteur, Paris;—Annales.
- Instituto Oswaldo Cruz (Brasil)—Memorias.
- International abstract of surgery. —*See* when unbound in S.G.&O. Bound file, —*See* direct name.
- International clinics.
- Inter-state post-graduate medical association of North America, (International assembly). —  
Proceedings.
- Irish journal of medical science.
- Japanese journal of medical sciences; Sections of—  
Biochemistry.—Transactions.  
Biophysics.—Transactions.  
Dermatology & urology.—Transactions.  
Social medicine & hygiene.—Transactions.
- Johns Hopkins hospital.—Bulletin.
- Journal de chirurgie.
- Journal de physiologie et de pathologie générale;—Dept. Ph.
- Journal of the American medical association. —*See*  
American medical association;—Journal.
- Journal of anatomy.—Dept. A.
- Journal of the association of American medical colleges. —*See*  
Association of American medical colleges. —  
Journal.
- Journal of bacteriology.—Dept. B.
- Journal of biochemistry (Japan).—Dept. Bc.
- Journal of biological chemistry.
- Journal of bone and joint surgery.
- Journal of the cancer research committee of the University of Sydney. —*See*  
Sydney - University - Cancer research committee.—Journal.
- Journal of clinical investigation.
- Journal of comparative neurology.—Dept. A.
- Journal of experimental medicine.
- Journal of general physiology.
- Journal of hygiene.
- Journal of immunology.
- Journal of industrial hygiene.
- Journal of infectious diseases.
- Journal of laboratory and clinical medicine.
- Journal of laryngology and otology.
- Journal of morphology and physiology.—  
Dept. A.
- Journal of nervous and mental disease.
- Journal of neurology and psychopathology.
- Journal of nutrition.
- Journal of obstetrics and gynaecology of the British Empire.
- Journal of pathology & bacteriology.
- Journal of pediatrics.
- Journal of pharmacology and experimental therapeutics.—Dept. Ph.
- Journal of physiology.—Dept. Ph.
- Journal of the Missouri state medical association. —*See*  
Missouri state medical association—Journal.
- Journal of urology.
- Klinische wöchenschrift.
- The Lancet.
- The Laryngoscope.
- The Library journal.
- League of Nations: Quarterly bulletin of the health organization.

- Manitoba medical association—Review.  
Formerly Manitoba medical association —  
Bulletin.
- Manitoba - University—Medical journal.
- Maryland - University - School of medicine—  
Bulletin.
- Mayo Clinic—Collected papers.
- Mayo Clinic;—Proceedings of the Staff meetings.
- Medical and chirurgical faculty of the state of  
Maryland—Transactions.
- Medical Annual.
- Medical clinics of North America.
- Medical journal of Australia.
- Medical library association—Bulletin.
- Medicine.
- Memorial hospital for the treatment of cancer and  
allied diseases, New York; Laboratory and clinical  
studies. —*See*  
New York; Laboratory and clinical studies.  
New York—Memorial hospital . . . Studies.
- Memorias do instituto Oswaldo Cruz. —*See*  
Instituto Oswaldo Cruz—Memorias.
- Middlesex hospital—Medical school. London.  
Published papers by members of the staff.
- Minnesota medicine.
- Missouri state medical association—Journal.
- Münchener medizinische wöchenschrift.
- National Jewish hospital for consumptives.  
Denver, Col.  
Research dept. Contributions to the study  
of tuberculosis.
- National health review (Canada).
- National medical (Association) journal of China.  
Nature.
- Neurological institute of New York—Bulletin.
- New England journal of medicine.
- New York (City)  
Lying - in hospital—Bulletin.  
Memorial hospital for the treatment of cancer  
& allied diseases; Laboratory and clinical  
studies.  
Montefiore hospital—Collected reprints.  
Mount Sinai hospital — Collected reprints  
from the laboratories.
- New York (State)  
Dept. of health. Division of laboratories &  
research - Studies - Collected reprints.
- New York academy of medicine—Bulletin.
- Otago - University - Dunedin, N.Z. Medical school  
—Proceedings.
- Pennsylvania - University—  
Dept. of medicine—Studies.  
Dept. of pathology—Studies.
- Pflüger's Archiv für die gesamte physiologie des  
menschen u. der tiere.—Dept. Ph.
- Physiological abstracts.—Dept. Ph.
- Physiological reviews.—Dept. Ph.
- Practical medicine series;  
General medicine.  
General surgery.  
General therapeutics.  
Neurology, psychiatry.
- Obstetrics & gynaecology.  
Pediatrics.  
Urology.
- The Practitioner.
- La Presse médicale.
- Proceedings of society for experimental biology  
and medicine. —*See*  
Society for experimental biology and medicine—  
Proceedings.
- Proceedings International assembly inter-state  
post-graduate medical association of North  
America. —*See*  
International assembly inter-state post-graduate  
medical association of North America—  
Proceedings.
- Proceedings of the Royal society of medicine.—*See*  
Royal society of medicine—Proceedings.
- Proceedings of the staff meetings of the Mayo  
Clinic. —*See*  
Mayo Clinic—Proceedings of the staff meetings.
- Proceedings of the University of Otago Medical  
school. —*See*  
Otago - University - Dunedin, N.Z. — Medical  
school—Proceedings.
- Public health reports of the United States Public  
Health Service. —*See*  
United States - Public health service - Public  
health reports.
- Quarterly cumulative index medicus.
- Quarterly journal of experimental physiology  
—Dept. Ph.
- Quarterly journal of medicine.
- Radiology.
- Revue neurologique.
- Rockefeller institute for medical research, New  
York.—Studies, Collected reprints -  
Royal society of medicine—Proceedings.
- Société de biologie, Paris — Comptes rendus des  
séances.—Dept. Ph.
- Société de chimie biologique, Paris — Bulletin —  
Dept. Be.
- Société des chirurgiens de Paris — Bulletins et  
mémoires.
- Société des séances med. et biol. de Montpellier—  
Archives.
- Société médicale des hôpitaux de Paris—Bulletins  
et mémoires.
- Society for experimental biology and medicine—  
Proceedings.
- South African institute for medical research.
- Stain technology.
- Surgery, gynecology and obstetrics.
- Surgical clinics of North America.
- Sydney - University - Cancer research committee—  
Journal.
- Toronto - University—Medical journal.
- Transactions of the association of American  
physicians. —*See*  
Association of American physicians — Trans-  
actions.
- Transactions of the American surgical associa-  
tion. —*See*  
American surgical association—Transactions.

Transactions of the college of physicians of Philadelphia. —See

College of physicians of Philadelphia.—  
Transactions.

Transactions of the Edinburgh Med.-chirurg.  
society. —See

Edinburgh Med.-chirurg. soc.—Transactions.  
(When unbound see in the Edinburgh medical  
journal).

Transactions of the Edinburgh Obstetrical society.  
—See

Edinburgh obstetrical society—Transactions.  
(When unbound see in the Edinburgh medical  
journal).

Trudeau sanatorium, Trudeau, N.Y. Annual med-  
ical report and studies.

Tubercle.

United States—Public health—Bulletin.

United States — Public health service — Public  
health reports.

University of Manitoba medical journal. —See  
Manitoba—University—Medical journal.

University of Toronto medical journal. —See  
Toronto—University—Medical journal.

University of Western Ontario medical journal.  
—See

Western Ontario—University—Medical journal.

Western surgical association—Transactions.

Western Ontario—University Medical journal.

Wiener klinische wöchenschrift.

Vancouver medical association—Bulletin.

NOTE.—Lettering at the end of journal title designates where journal is on file—e.g.—American journal of anatomy—Dept. A. These journals are allowed out of the library only for urgent reasons.

Dept. A.—Anatomy Department.

Dept. B.—Bacteriology Department.

Dept. Bc.—Biochemistry Department.

Dept. Pa.—Pathology Department.

Dept. Ph.—Physiology Department.

Journals without any Dept. and letter after them are on file in the main Medical Library Reading Room, for the Current Year or Volume, and in Stack Rooms for previous years.

#### OFFICE TO LET IN KENNEDY BLDG.

Wanted — Professional man to share office with Dentist. Private office; furnished waiting room; low rent. — Apply Mr. Affleck, 321 Portage Ave. Tel. 27 477.

#### FOR SALE — INSTRUMENTS

A quantity of instruments belonging to the late Dr. Hugh Mackay, Dermatologist, are for sale, either collectively or individually, and may be seen at the office of the undersigned. Apply

NATIONAL TRUST COMPANY LIMITED  
250 Portage Ave. Winnipeg.

# OGILVIE'S

# TONIK WHEAT-GERM

SOLD DIRECT  
BY MAIL ONLY

Write for Free  
Descriptive Booklet

A FOODSTUFF RICH IN VITAMINS  
AND MINERAL SALTS

Contains  
VITAMIN A, B1, B2 & E

ALSO MINERAL SALTS, CALCIUM  
MAGNESIUM, SODIUM and POTASSIUM  
PHOSPHEROUS, MANGANESE-IRON  
COPPER and ZINC

## The Ogilvie Flour Mills Co. Limited

WINNIPEG, MAN.